

REMARKS

In the Office Action, claims 1-34 were pending. Claims 1-34 were rejected. In this response, claims 1, 10, 18, and 27 have amended without introducing any new matter. No claims have been cancelled or added. Thus, claims 1-34 remain pending. Reconsideration of this application, in light of the following remarks, is respectfully requested.

The Examiner rejected claims 1-17 and 27-34 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent App. Pub. 2001/0032308 of Grochowski et al. (hereinafter "Grochowski"). The Applicant respectfully disagrees and submits that Grochowski does not disclose each and every element of the invention claimed by the Applicant.

Grochowski describes a method for conditionally executing an instruction based on a predicted predicate value (Grochowski, Abstract; Figures 5-6). A confidence value is predicted for a predicate of an instruction (Grochowski, Figure 5, element 510). If the confidence value is greater than a threshold, the predicted predicate is used and the instruction is executed (Grochowski, paragraphs 10-11; paragraphs 59-61). However, if the confidence value is below the threshold, the instruction is stalled from execution and treated as a no-op (Grochowski, paragraph 62).

Claim 1, as amended, recites:

A processor, comprising:
a predicate predictor to determine a predicted predicate value and a confidence value for the predicted predicate value for a first instruction with a predicate; and
a micro-op generator to issue a first set of micro-ops corresponding to said first instruction when said confidence value is high and a second set of micro-ops corresponding to said first instruction when said confidence value is low.

Applicant respectfully submits that Miller fails to describe or suggest each and every element as claimed by the Applicant in claim 1, as amended. Rather, Grochowski describes the use of a predicted predicate value to either execute an instruction based on the predicated predicate, or stall execution of the instruction based on the predicated predicate. By stalling instruction execution when the confidence of a predicted predicate value is low, the method of Grochowski performs actions which do not correspond to the instruction for which the predicate was predicted. The Applicant, however, claims "a micro- op generator to issue a first set of micro-ops corresponding to said first instruction when said confidence value is high and a second set of micro-ops corresponding to said first instruction when said confidence value is low." That is, a second set of micro-ops are issued which correspond to the first instruction when a confidence value is low, and thus are selectively issued. Thus, the Applicant respectfully submits

that Grochowski fails to describe each and every feature as claimed by the Applicant.

Accordingly, Applicant respectfully submits that the rejection of claim 1 under 35 U.S.C. § 102(b) has been overcome by the remarks. Since independent claims 10 and 27 contain similar features and limitations to those discussed above, claims 10 and 27 are also not anticipated by Grochowski under 35 U.S.C. § 102(b) for similar reasons. The Applicant respectfully requests withdrawal of the rejection.

Further, dependent claims 2-9, 11-17, and 28-34 depend from independent claims 1, 10, and 27, respectively, and include additional features and limitations. Since claims 1, 10, and 27 were not anticipated by Grochowski under 35 U.S.C. § 102, Grochowski also fails to anticipate claims 2-9, 11-17, and 28-34 under 35 U.S.C. § 102. The Applicant respectfully requests withdrawal of the rejection.

The Examiner rejected claims 18-26 under 35 U.S.C. § 103(a) as being unpatentable over Grochowski in view of Free Online Dictionary of Computing (hereinafter "Foldoc"). Similar to the discussion above with respect to independent claim 27, independent claim 18 includes limitations directed towards selectively executing a set of micro-ops based on a confidence value for a predicted predicate value of an instruction. As discussed above, however, Grochowski fails to describe limitations directed towards selectively executing a set of micro-ops based on a confidence value for a predicted predicate value of

an instruction. Foldoc is an online computing terms dictionary, from which high level definitions of a computer, input/output, and peripheral were cited by the Examiner. However, the definitions of a computer, input/output, and peripheral fail to address executing instructions, micro-ops, predicted predicate values, etc. Therefore, the definitions cited from Foldoc also fail to describe or suggest limitations directed towards selectively executing a set of micro-ops based on a confidence value for a predicted predicate value of an instruction. Thus, for reasons similar to those discussed above, Grochowski and Foldoc, alone or in combination, fail to describe or suggest the limitations as claimed in claim 18. Thus, the Applicants respectfully submit that claim 18 is not rendered obvious by Grochowski in view of Foldoc. Furthermore, since claims 19-26 depend directly or indirectly from independent claim 18, and include additional features and limitations, claims 19-26 are also not rendered obvious by Grochowski in view of Foldoc, for at least the reasons discussed above. The Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 103.

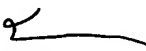
Applicant respectfully submits the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call the undersigned at (408) 720-8300.

Authorization is hereby given to charge our Deposit Account No. 02-2666
for any charges that may be due.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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Michael J. Mallie
Attorney for Applicant
Reg. No. 36,591

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA 90025-1026
(408) 720-8300